

REMARKS

This is in response to the Final Office Action mailed March 8, 2007. Note that the Office Action rejected claim 23, which was cancelled by a prior amendment. With entry of the amendments, claims 1-4, 9, 11-13, 15-17, 19-20, and 26 are amended, claim 10 is cancelled, and claims 1-7, 9, 11-17, 19-22, and 24-27 are pending in the application for examination and allowance.

Response to Interview Summary Mailed 4-26-07

As a preliminary matter, Applicant and Attorney Jonas wish to thank Examiner Price for conducting the telephone interview of April 20, 2007.

The Hess reference and the claims were discussed during the course of the interview, although no agreement was reached. During that interview, Attorney Jonas (Reg. No. 58,590) proffered that Hess teaches away from the limitations of the claims, citing the portion of Hess quoted in the Interview Summary, as well as the portion of the instant application cited in the Interview Summary, which are discussed below. Attorney Jonas generally proffered that a control system that turns light sources on to generate backlighting when a fireplace is no longer simulating a fire within its combustion chamber is distinguishable from Hess. Attorney Jonas also proffered that temperature-based control is distinguishable from Hess.

Support for the Amendments

Support for the amendments to the claims can be found throughout the application as filed, for example, according to at least the following:

“Another concern is providing an appealing view of the fireplace contents when gas and electric fireplaces are not simulating the flame of a natural fire.” *Specification*, page 1, lines 17-20.

“[T]he backlighting system is configured to turn on the light source when a natural fire is not being simulated within the fireplace.” *Specification*, claim 10 as filed.

“The fireplace 100 generally functions to ignite combustible gas provided from a combustible gas source to create a gas flame.” *Specification*, page 4, lines 28-29.

“A burner 245 is shown positioned in the combustion chamber enclosure 105 to combust gas and thereby generate heat.” *Specification*, page 5, lines 20-21.

“[I]f the control system 320 senses that the fireplace is no longer simulating a fire within the combustion chamber (i.e., an off state), it can then turn the light sources 305, 310, and 315 of the backlighting system 300 on to generate backlighting. Similarly, if the control system 320 senses that the fireplace 100 is simulating a fire within the combustion chamber 110 (i.e., an on state), it can then turn the light sources 305, 310, and 315 off.” *Specification*, page 6, line 27 to page 7, line 3.

“The photocell 324 can sense the intensity (input) of light generated by the simulated fire... The control system 320 can control the light sources 305, 310, and 315 based upon the input at the photocell 324....[T]he photocell 324 can sense the intensity of the light generated by the simulated fire and modulate the light emanating from the light sources 305, 310, and 315 in response to the intensity.” *Specification*, page 7, lines 16-23.

“[T]he control system 320 can be configured to measure a temperature of the fireplace.... The control system 320 can then modulate the intensity of the light produced by the backlighting system 300 based on the measured temperature.” *Specification*, page 8, lines 1-6.

In view of at least the above, read by one of ordinary skill in the art, the amendments are fully supported by the application as filed. Entry of the amendments and examination on the merits is respectfully requested.

35 U.S.C. § 112, Second Paragraph

Claims 1-7, 9-17 and 19-27 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the invention. The claims as amended are sufficiently definite to inform the public as to the boundaries of what constitutes infringement of the patent and to provide a clear measure of what applicants regard as the invention. MPEP § 2173. Withdrawal of the rejection under 35 U.S.C. § 112, second paragraph is respectfully requested.

35 U.S.C. § 103

Claims 1-7, 9-17, 19-22, and 24-27 were rejected under 35 U.S.C. § 103(a) as obvious over UK Patent Application GB 2261942 (“Morley”) or U.S. Patent 2,445,250 (“Steingruber”) in view of Canadian Patent Application CA 2,262,238 (“Hess”).

As a starting point, at page 6 of the Office Action it is conceded that neither Morely nor Steingruber discloses (1) a control system positioned in a fireplace and operably connected to a lighting system, (2) a sensor positioned in a combustion chamber and operably coupled to a control system, wherein the sensor senses a state of a fireplace and the control system controls a backlighting system depending on the state of the fireplace, or a dependence or inter-dependence of operating an illumination lamp system and a burner fire system relative to each other. Thus, the limitations of claim 1 relating to “a control system in electrical communication with the sensor and the backlighting system, the control system configured to cause the backlighting system to shine light on the rear panel when the burner is not generating flames as sensed by the sensor” are not provided by Morely or Steingruber. The limitations of independent claims 9, 15, and 20 are similarly absent from Morely and Steingruber.

In turn, Hess relates to a device that turns on lighting effects when it senses a sufficient amount of light is being generated by flames. Hess describes “enhancing the realistic appearance of flames produced by a simulated fireplace (gas or electric) by providing additional ambient lighting effects in response to sensed light intensity within the fireplace.” *Hess* at abstract (emphasis added). According to Hess, “[w]hen the simulated fireplace is operational [i.e., in an on state], the display lighting of the device produces a ‘flickering’ effect that is synchronized with the changes in light intensity occurring within the fireplace.” *Id.* In other words, Hess specifically addresses a device that turns on lighting when flames are being produced, not a device that “shine[s] light on the rear panel when the burner is not generating flames as sensed by the sensor” as recited in claim 1 as amended. Thus, Hess teaches away from the limitations of claim 1 as amended. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. __ (2007) (slip opinion) at 12 (teaching away in the prior art is evidence of non-obviousness).

Support for this reading of Hess is provided throughout the reference. For example, Hess specifically describes a system where when enough light from flames is detected, display lamps turn on, but when light from the flames falls below a certain threshold, the lamps turn off. *See, e.g., Hess*, page 5 (“Control circuit 29 has certain circuit parameters selected so that when a certain light intensity threshold is exceeded, control circuit 29 will turn on the display lamps 27 and when the detected light falls below the light intensity threshold, control circuit 29 will turn off display lamp 27.”) (emphasis added); *Hess*,

page 6 ("Each photosensor [] causes a corresponding control circuit [] to turn on a corresponding display lamp [] when the light detected by the photosensor [] rises above the light intensity threshold.) (emphasis added).

In view of the above, the cited references fail to render the limitations of claim 1 as amended obvious. In fact, Hess teaches away from the limitations of claim 1 as described above. Hess similarly fails to teach, and actually teaches away from the limitations of independent claims 9, 15, and 20 ("causing the backlighting system to stop shining light on the rear panel when flames are being generated in the combustion chamber as sensed by the sensor" (claim 9); "provid[ing] aesthetic lighting on at least the back panel when the burner is not generating heat in the combustion chamber as sensed by the sensor" (claim 15); and "shining light directly on the plurality of ledges with the light source upon sensing that light from the flames is not being generated in the combustion chamber" (claim 20)).

In sum, the cited references, fail to anticipate or render the limitations of independent claims 1, 9, 15, and 20 obvious. The remaining claims depend, in some form, from independent claims 1, 9, 15, and 20. As such, withdrawal of the rejection of claims 1-7, 9, 11-17, 19-22, and 24-27, allowance of those claims, and notice to that effect are respectfully requested.

Respectfully submitted,
FAEGRE & BENSON LLP

By:



Victor P. Jonas, #58,590
Customer No.: 58506
612/766-7611

Dated: May 8, 2007

fb.us.1944130.02